VIII. Claim 21, drawn to a method to normalize signals due to different expression levels of a particular drug target in a tissue or cell membrane, classified in class 427, subclass 2.11, for example.

IX. Claim 22, drawn to a biological, biochemical, or chemical analysis assembly, classified in class 435, subclass 287.1, for example.

2. The inventions are distinct, each from the other because of the following reasons: Inventions I-VIII are independent and patentably distinct. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the method of Group I includes a step of providing a microarray having a number of probe microspots deposited on a substrate surface, which is not required by the methods of Groups II-VIII. The method of Group II includes providing a microarray having a number of microspots of cell membranes from different tissues or cells and determining the level of a drug target in different microspots, which are not required by the methods of Groups I and III-VIII. The method of Group III includes providing a microarray having a number of microspots of cell membranes, in which the cell membranes are from both a normal tissue cell and a analogous diseased- or abnormal tissue cell, and comparing the level of a drug target in the diseased-tissue cell with that in normal tissue cell, which are not required by the methods of Groups I, II, IV-VIII. The method of Group IV includes providing microarray of protein receptors embedded in lipid membranes and providing a solution containing a target protein,

which is either labeled or unlabeled. These steps are not required by the methods of Groups I-III and V-VIII. The method of Group V includes providing a microarray of probe protein receptors embedded in lipid membranes and providing a solution of cell lysates containing a target protein, which can be either natural or fusion protein. These steps are not required by the methods of Groups I-IV and VI-VIII. The method of Group VI includes providing microarray of lipid receptors, which are either purified or embedded with lipid membranes, and providing a solution containing target protein, labeled or unlabeled. These steps are not required by the methods of Groups I-V and VII, VIII. The method of Group VII includes providing a microarray of probe lipid receptors embedded in lipid membranes and providing a solution of cell lysates containing a target protein, which can be either a natural or a fusion protein. These steps are not required by the methods of Groups I-VI and VIII. The method of Group VIII includes providing cell membrane preparations from different tissue cells, either normal or abnormal, and reformulating the cell membrane preparations in a buffer containing pH buffer, inorganic salt, BSA and sucrose, optionally glycerol, such that the total membrane protein concentration is identical or same for the membrane preparations. These steps are not required by the methods of Groups I-VII. Therefore, the methods of Groups I-VIII have different modes of operation.

Inventions I-VIII and IX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different

process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process. For example, the product of Group I can be used in a nucleic acid hybridization assay for high throughput analysis of genotype and gene expression.

3. Because these inventions are distinct for the reasons given above, have acquired a separate status in the art because of their recognized divergent subject matter, and searches for one group are not required for the others, restriction for examination purposes as indicated is proper.

4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Unsu Jung whose telephone number is 571-272-8506. The examiner can normally be reached on M-F: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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